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5514 7590 05/07/2004 FITZPATRICK CELLA HARPER & SCINTO 30 ROCKEFELLER PLAZA			EXAMINER	
			PARTON, KEVIN S	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Applicant(s) HUANG, HUNG Art Unit 2153 EXPIRE 3 MONTH(S) FROM however, may a reply be timely filed y minimum of thirty (30) days will be considered time topire SIX (6) MONTHS from the mailing date of this ion to become ABANDONED (35 U.S.C. § 133). unication, even if timely filed, may reduce any -final. r formal matters, prosecution as to the le, 1935 C.D. 11, 453 O.G. 213.	ely. communication.
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DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1 and 24 have been considered but are most in view of the new ground(s) of rejection.

Drawings

2. The drawings were received on 12/01/2000. These drawings are acceptable.

Claim Rejections - 35 USC § 103

- 3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 4. Claims 1-18, and 22-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagidaira (USPN 6,490,052) in view of Mastie et al. (USPN 6,515,756).
- 5. Regarding claim 1, Yanagidaira (USPN 6,490,052) teaches a system for supporting printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configurations, with means for:
 - a. Accessing one of the printer configurations (database records) which corresponds to the printer, the configuration including a plurality of printer maintenance function names and a plurality of printer maintenance commands (operating and setting states) corresponding to the printer maintenance function names (column 6, lines 8-17).

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b. Generating an HTML-based page corresponding to the printer, the
 HTML-based page containing each of the printer maintenance function
 names from the accessed printer configuration (column 6, lines 14-28).

- c. Sending the HTML-based page to the network device (column 6, lines 20-23).
- d. Wherein, upon selection in the network device of one of the printer maintenance function names in the HTML-based page, the server sends to the printer the printer maintenance command which corresponds to the selected printer maintenance function name (column 7, lines 21-32).

Although the system disclosed by Yanagidaira (USPN 6,490,052) shows substantial features of the claimed invention, it fails to disclose means wherein the printer configurations are stored and accessed as printer configuration files.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052), as evidenced by Mastie et al. (USPN 6,515,756).

In an analogous art, Mastie et al. (USPN 6,515,756) discloses a system for accessing and utilizing printer configurations wherein the printer configurations are stored and accessed as printer configuration files (column 4, lines 5-8; 36-39; column 5, lines 45-50; column 5, line 67 – column 6, line 1).

Given the teaching of Mastie et al. (USPN 6,515,756), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of printer configuration

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files. This benefits the system because files are more easily accessed by users and can be changed without giving access to a database to change records.

- 6. Regarding claim 2, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 1. He further teaches means for receiving a printer maintenance request from the network device, the printer maintenance request containing a reference to the printer (column 5, lines 43-47; column 6, lines 8-10).
- 7. Regarding claim 3, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 2. He further teaches means wherein the accessing step is performed in response to receipt of the printer maintenance request (column 6, lines 8-15).
- 8. Regarding claim 4, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 1. He further teaches means wherein each of the printer configurations has a standardized data format (column 6, lines 11-15). Note that all data is store in the same data structure in the database.

Although the system disclosed by Yanagidaira (USPN 6,490,052) shows substantial features of the claimed invention, it fails to disclose means wherein the printer configurations are stored and accessed as printer configuration files.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052), as evidenced by Mastie et al. (USPN 6,515,756).

In an analogous art, Mastie et al. (USPN 6,515,756) discloses a system for accessing and utilizing printer configurations wherein the printer configurations are stored and accessed as printer configuration files (column 4, lines 5-8; 36-39; column 5, lines 45-50; column 5, line 67 – column 6, line 1).

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Given the teaching of Mastie et al. (USPN 6,515,756), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of printer configuration files. This benefits the system because files are more easily accessed by users and can be changed without giving access to a database to change records.

- 9. Regarding claim 5, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 4. He further teaches means wherein the standardized format is an industry standard format (column 5, lines 20-22; column 6, lines 11-15). Note that these states are commonly used in the industry.
- 10. Regarding claim 6, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 4. He further teaches means wherein the standardized data format includes an industry standard format and an extension to the industry standard format (column 5, lines 20-22; column 6, lines 11-15).
- Regarding claim 7, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 1. He further teaches means wherein each of the printer configurations includes a plurality of printer maintenance function data sets, wherein each printer maintenance function data set includes a printer maintenance function name, a printer maintenance function description, a printer maintenance function resource and a printer maintenance function command parameter (column 5, lines 20-22; column 5, lines 31-36). Note that in order for the commands listed to be carried out, al of these fields are necessary.

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Although the system disclosed by Yanagidaira (USPN 6,490,052) shows substantial features of the claimed invention, it fails to disclose means wherein the printer configurations are stored and accessed as printer configuration files.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052), as evidenced by Mastie et al. (USPN 6,515,756).

In an analogous art, Mastie et al. (USPN 6,515,756) discloses a system for accessing and utilizing printer configurations wherein the printer configurations are stored and accessed as printer configuration files (column 4, lines 5-8; 36-39; column 5, lines 45-50; column 5, line 67 – column 6, line 1).

Given the teaching of Mastie et al. (USPN 6,515,756), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of printer configuration files. This benefits the system because files are more easily accessed by users and can be changed without giving access to a database to change records.

- Regarding claim 8, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 7. He further teaches means wherein the printer maintenance function resource is a file containing image data for incorporation into the HTML-based page (column 6, lines 19-21)
- 13. Regarding claim 9, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 8. He further teaches means wherein the image data in the file represents the printer maintenance function name corresponding to the printer maintenance function resource (column 6, lines 25-29).

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14. Regarding claim 10, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 7. He further teaches means wherein the printer maintenance function command parameter is a printer maintenance function command which is identified by the printer maintenance function name corresponding to the printer maintenance function command parameter (column 5, lines 20-25, 30-35).

- 15. Regarding claim 11, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 7. He further teaches means wherein the printer maintenance function command parameter represents a command file containing a printer maintenance function command which is identified by the printer maintenance function name corresponding to the printer maintenance function command parameter (column 6, lines 19-29).
- 16. Regarding claim 12, although the system disclosed by Yanagidaira (USPN 6,490,052) (as applied to claim 7) shows substantial features of the claimed invention, it fails to disclose a command parameter indicator which, when set to a first value, indicates that the printer maintenance function command parameter is a printer maintenance function command and, when set to a second value, indicates that the printer maintenance function command parameter represents a command file containing a printer maintenance function command.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of a parameter to determine if the instruction is a single command or a file. This benefits the system because different modes (protocols) of communication may be

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required depending on the format of the data. In the instance that a large file is to be sent, communication may delayed until a time of low network usage.

- 17. Regarding claim 13, Yanagidaira (USPN 6,490,052) teaches all of the limitations as applied to claim 1. He further teaches means wherein the interface module is a standardized software module for building an HTML-based page (column 6, lines 19-24).
- 18. Regarding claim 14, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 13. He further teaches means wherein the interface module is provided by the operating system of the server (column 6, lines 19-24).
- 19. Regarding claim 15, although the system disclosed by Yanagidaira (USPN 6,490,052) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose specifically means wherein the interface module is a common gateway interface module.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of a common gateway interface module. This is common in the art and would benefit the system by allowing new devices and functions to be implemented more quickly and reliably.

20. Regarding claim 16, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 1. He further teaches means wherein the selection by the network device of one of the printer maintenance function names is performed by a user of the network device (column 5, lines 43-46, 56-60).

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21. Regarding claim 17, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 1. He further teaches means wherein the user of the network device selects one of the printer maintenance function names by using a pointing device connected to the network device (column 5, lines 56-60).

- 22. Regarding claim 18, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 1. He further teaches means wherein the method is performed in the server (figure 1; column 5, lines 39-31). Note that all of the functions take place in the printer server of the reference.
- Regarding claim 22, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claim 1. He further teaches means wherein the server executes a script to send the printer maintenance command to the printer (column 7, lines 21-32).
- 24. Regarding claim 24, Yanagidaira (USPN 6,490,052) teaches a system for supporting printer maintenance in a network environment having a server, a plurality of network devices, and a printer connected to one of the plurality of network devices, the server containing a plurality of printer configurations, with means for:
 - a. Receiving a printer maintenance request from one of the network devices, the printer maintenance request containing a reference to the printer (column 5, lines 55-60).
 - b. Accessing one of the printer configurations which corresponds to the printer, the printer configurations having a standardized data format and including a plurality of printer maintenance function data sets each of which includes a printer maintenance function name, a printer maintenance function description, a printer maintenance function

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resource and a printer maintenance function command parameter (column 6, lines 8-17).

- c. Generating, by use of an interface module in the server, an HTML-based page corresponding to the printer, the HTML-based page containing for each printer maintenance function data set the corresponding printer maintenance function name, the printer maintenance function description, and the printer maintenance function resource (column 6, lines 14-28).
- d. Sending the HTML-based page to the network device that sent the printer maintenance request (column 6, lines 20-23)
- e. Wherein, upon selection by the network device of one of the printer maintenance function names in the HTML-based page, the server sends to the printer a printer maintenance function command which is derived from the printer maintenance function command parameter corresponding to the selected printer maintenance function name (column 7, lines 21-32).

Although the system disclosed by Yanagidaira (USPN 6,490,052) shows substantial features of the claimed invention, it fails to disclose means wherein the printer configurations are stored and accessed as printer configuration files.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052), as evidenced by Mastie et al. (USPN 6,515,756).

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In an analogous art, Mastie et al. (USPN 6,515,756) discloses a system for accessing and utilizing printer configurations wherein the printer configurations are stored and accessed as printer configuration files (column 4, lines 5-8; 36-39; column 5, lines 45-50; column 5, line 67 – column 6, line 1).

Given the teaching of Mastie et al. (USPN 6,515,756), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of printer configuration files. This benefits the system because files are more easily accessed by users and can be changed without giving access to a database to change records.

25. Regarding claim 23, although the system disclosed by Yanagidaira (USPN 6,490,052) (as applied to claim 22) shows substantial features of the claimed invention, it fails to disclose specifically means wherein the script is a common gateway interface script.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052).

A person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of a common gateway interface script. This is common in the art and would benefit the system by allowing new devices and functions to be implemented more quickly and reliably.

26. Claims 19, 20, 21, and 25-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756) as applied to claims 1 and 24 above, and further in view of Lauder et al. (USPN 6,253,238).

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27. Regarding claim 19, although the system disclosed by Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756) (as applied to claim 1) shows substantial features of the claimed invention, it fails to disclose means wherein the network environment is a digital cable network.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756), as evidenced by Lauder et al. (USPN 6,253,238).

In an analogous art, Lauder et al. (USPN 6,253,238) discloses a printing network wherein the network environment is a digital cable network (figure 4; column 6, lines 53-58).

Given the teaching of Lauder et al. (USPN 6,253,238), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756) by employing the use of a digital cable network. This benefits the system by allowing a larger number of users on smaller home networks to service network printers.

Regarding claim 20, although the system disclosed by Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756) (as applied to claim 19) shows substantial features of the claimed invention, it fails to disclose means wherein the network device is a set top box.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756), as evidenced by Lauder et al. (USPN 6,253,238).

In an analogous art, Lauder et al. (USPN 6,253,238) discloses a printing network wherein the network device is a set top box (figure 4; column 6, lines 53-58).

Given the teaching of Lauder et al. (USPN 6,253,238), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756) by employing the use of a set top box. This benefits the system by allowing a larger number of users on smaller home networks to service network printers using hardware already installed in the home.

29. Regarding claim 21, although the system disclosed by Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756) (as applied to claim 19) shows substantial features of the claimed invention, it fails to disclose means wherein the method is performed in the server which is located in a cable head end of the digital cable network.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756), as evidenced by Lauder et al. (USPN 6,253,238).

In an analogous art, Lauder et al. (USPN 6,253,238) discloses a printing network wherein the method is performed in the server which is located in a cable head end of the digital cable network (figure 4; column 6, lines 53-58).

Given the teaching of Lauder et al. (USPN 6,253,238), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) and Mastie et al. (USPN 6,515,756) by executing the steps in a server located in a cable head end of the digital cable network.

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This benefits the system by allowing the server to run on a piece of hardware already functioning in the desired location.

- 30. Regarding claim 25, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claims 1-24. He further teaches a program memory for storing process steps executable to perform a method according to any of Claims 1 to 24; and a processor for executing the process steps stored in said program memory (figure 1).
- Regarding claim 26, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claims 1-24. He further teaches computer-executable process steps stored on a computer readable medium, said computer-executable process steps to support printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configurations, said computer-executable process steps comprising process steps executable to perform a method according to any of Claims 1 to 24 (column 6, lines 8-28; column 7, lines 21-32; figure 1).

Although the system disclosed by Yanagidaira (USPN 6,490,052) shows substantial features of the claimed invention, it fails to disclose means wherein the printer configurations are stored and accessed as printer configuration files.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052), as evidenced by Mastie et al. (USPN 6,515,756).

In an analogous art, Mastie et al. (USPN 6,515,756) discloses a system for accessing and utilizing printer configurations wherein the printer configurations are

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stored and accessed as printer configuration files (column 4, lines 5-8; 36-39; column 5, lines 45-50; column 5, line 67 – column 6, line 1).

Given the teaching of Mastie et al. (USPN 6,515,756), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of printer configuration files. This benefits the system because files are more easily accessed by users and can be changed without giving access to a database to change records.

Regarding claim 27, Yanagidaira (USPN 6,490,052) teaches all the limitations as applied to claims 1-24. He further teaches a computer-readable medium which stores computer-executable process steps, the computer-executable process steps to support printer maintenance in a network environment having a server, at least one network device and a printer, the server containing a plurality of printer configurations, said computer-executable process steps comprising process steps executable to perform a method according to any of Claims 1 to 24. (column 6, lines 8-28; column 7, lines 21-32; figure 1).

Although the system disclosed by Yanagidaira (USPN 6,490,052) shows substantial features of the claimed invention, it fails to disclose means wherein the printer configurations are stored and accessed as printer configuration files.

Nonetheless, these features are well known in the art and it would have been an obvious modification of the system disclosed by Yanagidaira (USPN 6,490,052), as evidenced by Mastie et al. (USPN 6,515,756).

In an analogous art, Mastie et al. (USPN 6,515,756) discloses a system for accessing and utilizing printer configurations wherein the printer configurations are

stored and accessed as printer configuration files (column 4, lines 5-8; 36-39; column 5, lines 45-50; column 5, line 67 – column 6, line 1).

Given the teaching of Mastie et al. (USPN 6,515,756), a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Yanagidaira (USPN 6,490,052) by employing the use of printer configuration files. This benefits the system because files are more easily accessed by users and can be changed without giving access to a database to change records.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Parton whose telephone number is (703)306-0543. The examiner can normally be reached on M-F 8:00AM - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenton Burgess can be reached on (703)305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kevin Parton Examiner

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